fx-82 SUPER
fx-250 HA

ENGLISH	*1*
DEUTSCH	*19*
FRANÇAIS	*37*
ESPAÑOL	*55*
ITALIANO	*73*

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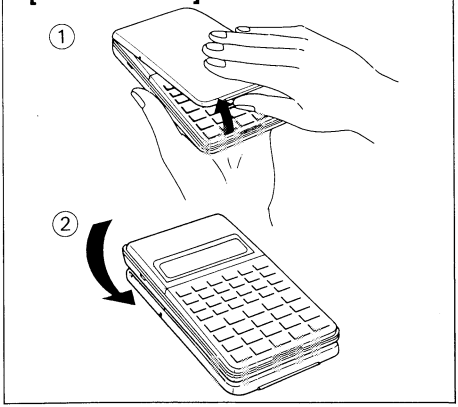
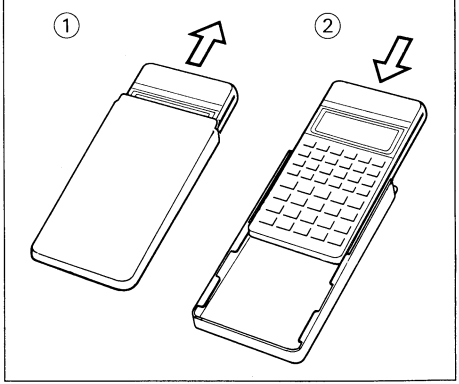
CASIO

[fx-82SUPER]



[fx-250HA]



Handling precautions

- Your calculator is made up of precision components. Never try to take it apart.
- Avoid dropping your calculator and subjecting it to other strong impacts.
- Do not store the calculator or leave it in areas exposed to high temperatures or humidity, or large amounts of dust. When exposed to low temperatures, the calculator may require more time to display results and may even fail to operate. Correct operation will resume once the calculator is brought back to normal temperature.
- The display will go blank and keys will not operate during calculations. When you are operating the keyboard, be sure to watch the display to make sure that all your key operations are being performed correctly.
- Never leave dead batteries in the battery compartment. They can leak and damage the unit.
- Avoid using volatile liquids such as thinner or benzine to clean the unit. Wipe it with a soft, dry cloth, or with a cloth that has been dipped in a solution of water and a neutral detergent and wrung out.
- In no event will the manufacturer and its suppliers be liable to you or any other person for any damages, expenses, lost profits, lost savings or any other damages arising out of loss of data and/or formulas arising out of malfunction, repairs, or battery replacement. The user should prepare physical records of data to protect against such data loss.
- Never dispose of batteries, the liquid crystal panel, or other components by burning them.
- Before assuming malfunction of the unit, be sure to carefully reread this manual and ensure that the problem in not due to insufficient battery power or operational errors.

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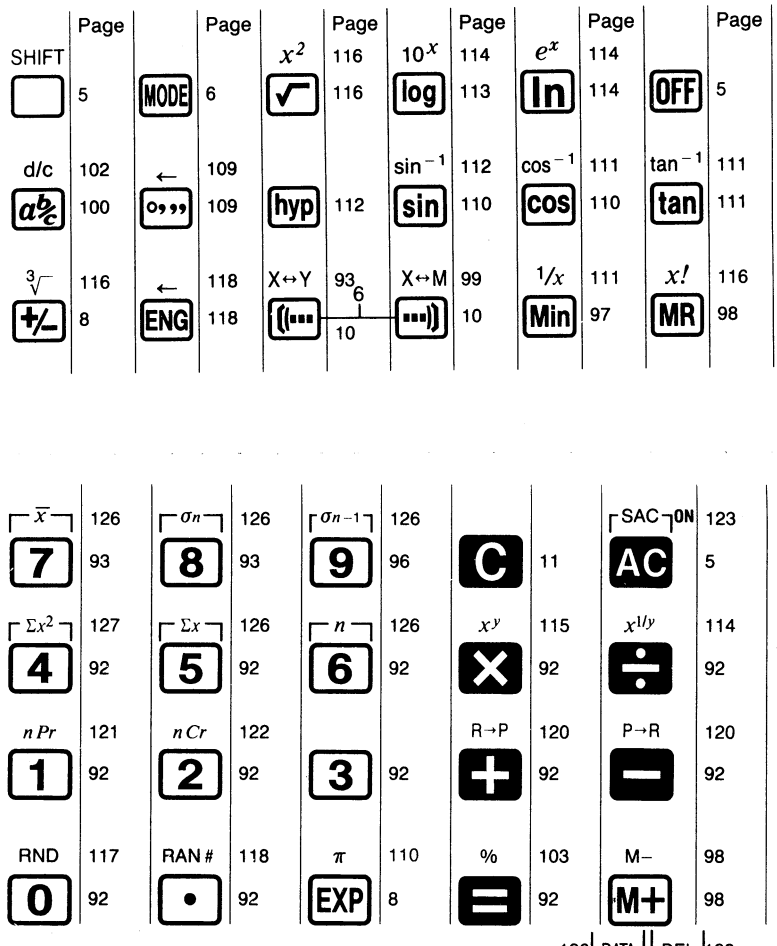
Page
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Important

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1/GENERAL GUIDE

1-1 Power ON/OFF

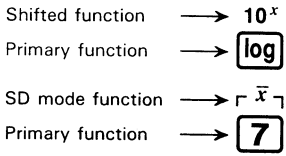
To turn your unit on, press [AC ON].
To turn your unit off, press [OFF].

Auto power-off function

This unit automatically switches off if not operated for approximately 6 minutes. Power can be restored by pressing the [AC ON] key. Memory contents and mode setting are retained even when power is switched off.

1-2 The keyboard

Many of the calculator's keys are used to perform more than one function. The functions marked on the keyboard are color coded to help you find the one you need quickly and easily.



Primary functions

These are the functions that are normally executed when you press the key.

Shifted functions

You can execute these functions by first pressing the [SHIFT] key, followed by the key that is assigned the shifted function you want to execute.

SD mode functions

You can execute these functions in the SD mode.

1-3 Modes

When using this calculator, it is necessary to select the proper mode to suit your calculation requirements. This can be done by using the MODE key in combination with the number keys. (Refer to plate below the display.)

MODE •: **SD is displayed.** Standard deviation calculation.

MODE 0: **COMP mode.** General calculations, including function calculations.

MODE 4: **DEG is displayed.** Specifies measurement in "degrees".

MODE 5: **RAD is displayed.** Specifies measurement in "radians".

MODE 6: **GRA is displayed.** Specifies measurement in "grads".

MODE 7: **FIX is displayed.** Specifies number of decimal places from 0 to 9.

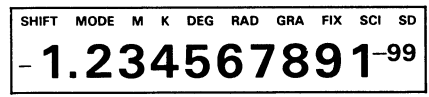
MODE 8: **SCI is displayed.** Specifies number of significant digits 1 to 10.

MODE 9: **Cancels "FIX" and "SCI" specifications.** This operation also changes the range of the exponent display (see page 7).

- You can use MODE 4 through MODE 6 in combination with the COMP Mode and SD Mode. The unit of angular measurement is retained when you switch power off.
- Make sure you press the AC key before making MODE 4 through MODE 6 settings.

1-4 Display symbols

Indicators appear on the display to show you the current status of the calculator.



-E- or -C-: Error indicators

SHIFT: SHIFT key pressed

MODE: MODE key pressed

M: Independent memory indicator

K: Constant calculation indicator

DEG or RAD or GRA: Angular unit

FIX: Number of decimal places specified

SCI: Number of significant digits specified

SD: Standard deviation calculation

1-5 Exponential displays

During normal calculation, this calculator is capable of displaying up to 10 digits. Values that exceed this limit, however, are automatically displayed in exponential format. You can choose between 2 different types of exponential display formats.

NORM 1 mode:

10^{-2} (0.01) > $|x|$, $|x| \geqq 10^{10}$

NORM 2 mode:

10^{-9} (0.000000001) > $|x|$, $|x| \geqq 10^{10}$

You can select between the NORM 1 and NORM 2 mode by pressing MODE 9. There is no indication of which mode is currently in effect, but you can confirm the mode by performing the following calculation.

1 ÷ 200 =

→ 5.⁻⁰³ (NORM 1 mode)

→ 0.005 (NORM 2 mode)

(All of the example in this manual show calculation results using the NORM 1 mode.)

How to interpret exponential format

1.2 ¹¹

➡ 1.2×10^{11} ➡ 120,000,000,000

1.2^{11} indicates that the result is equivalent to 1.2×10^{11}. This means that you should move the decimal point in 1.2 eleven places to the right, since the exponent is positive. This results in the value 120,000,000,000.

1.2⁻⁰³

➡ 1.2×10^{-3} ➡ 0.0012

1.2^{-03} indicates that the result is equivalent to 1.2×10^{-03}. This means that you should move the decimal point in 1.2 three places to the left, since the exponent is negative. This result in the value 0.0012.

*Entry can be made in scientific notation by using the EXP key after entering the mantissa.

EXAMPLE	OPERATION	READ-OUT
$-1.234567891 \times 10^{-3}$ $(= -0.001234567891)$		
	1 . 234567891 +/-	-1.234567891
	EXP	-1.234567891 00
	3 +/-	-1.234567891 -03

1-6 Special display formats

Special display formats are used for the representation of fraction and sexagesimal values.

Fraction value display

456 ⌟ 12 ⌟ 23. Display of $456\frac{12}{23}$

Sexagesimal value display

12 ° 34 ° 56.78 Display of 12°34'56.78''

Before assuming a problem with your calculator...

If the result produced by the calculator is not what you expect or if an error occurs, perform the following operation to initialize the calculator.

1. MODE 0 (COMP mode)
2. MODE 4 (DEG mode)
3. MODE 9 (NORM mode)
4. Check the formula you are working with to confirm that it is correct.
5. Enter the correct modes to perform your calculation and try again.

2/ORDER OF OPERATIONS AND LEVELS

Operations are performed in the following order of precedence:

1. Functions
2. x^y, $x^{1/y}$, R→P, P→R, *nPr*, *nCr*
3. ×, ÷
4. +, −

Operations with the same precedence are performed from left to right, with operations enclosed in parentheses performed first. If parentheses are nested, the operations enclosed in the innermost set of parentheses are performed first.

*Registers L_1 through L_6 are provided to store operations of lower precedence (including parenthetical operations). Since six registers are provided, calculations up to six levels can be retained.

*Since each level can contain up to three open parentheses, parantheses can be nested up to 18 times.

Example (4 levels, 5 nested parentheses)

Operation

2 × ((3 + 4 × ((5 + 4)) − 3))

1 level 1 level 1 level 1 level A

− 5)) + 9 =

Register contents at point A.

x	4
L_1	((((5 +
L_2	4 ×
L_3	((((3 +
L_4	2 ×
L_5	
L_6	

3/CORRECTIONS

If you notice you've made a mistake when inputting a number (but you have not yet pressed an arithmetic operator key), just press C to clear the last value and then input it again.

In a series of calculations, you can correct errors in intermediate results by pressing C to clear the last calculation performed. You can then continue with the calculation.

If you want to change input of the +, −, ×, ÷, SHIFT x^2, or SHIFT $\sqrt{x}$ operator key, simply press the operator key you want to change to. In this case, the most recently pressed key operation is used, but the operation retains the order of precedence of the original operation you input.

4/OVERFLOW OR ERROR CHECK

An overflow or error is indicated and further calculation becomes impossible when the symbol "-E-" or "-[-" appears on the display. An overflow or error occurs when any of the following conditions occur.

a) When a result (whether intermediate or final) or accumulated total in the memory is more than $\pm(9.999999999 \times 10^{99})$ ("-E-" sign appears).
b) When function calculations are performed with a number exceeding the input range ("-E-" sign appears).
c) When an unreasonable operation (such as an attempt to calculate $\bar{x}$ and σn while $n=0$) is performed during statistical calculations ("-E-" sign appears).
d) When a mathematically illegal operation (such as division by zero: $6 \div 0$) is performed ("-E-" sign appears).
e) When the total number of levels of explicitly and/or implicitly nested parentheses exceeds 6, or when more than 18 pairs of parentheses are used ("-[-" sign appears).

Ex.) Pressing the (() key 18 times before inputting **2 + 3 ×**.

To release these overflow checks:

a), b), c), d)..... Press the AC key.
e)..... Press the AC key. Or press the C key and the intermediate result just before the overflow appears and the subsequent calculation can then be performed.

*If the result is within the range of $+(1 \times 10^{-99})$ to $-(1 \times 10^{-99})$, an error does not occur. Instead, the display shows all zeros.

5/POWER SUPPLY

The fx-82SUPER powered by two AA size manganese dry batteries (R6P (SUM-3) or UM-3). The fx-250HA powered by two G13 type (SR44 or LR44) batteries. As batteries power weakens, the characters on the display become dim and difficult to read. When this happens, replace the batteries as soon as possible.

Precautions!

Incorrectly using batteries can cause them to burst or leak, possibly damaging the interior of the unit.
Note the following precautions.

- Be sure to replace the batteries at least once every two years, regardless of how much the calculator is used during that time. Old batteries may leak, seriously damage the interior of the calculator.
- The batteries that come installed in the calculator when you purchase it are for factory test purposes, and so they may not provide a full service life.
- All data stored in the memory of the calculator is lost when you replace the batteries. Be sure to make a note of any important data before you replace the battery.
- Always be sure to load the batteries in the correct directions.
- Never mix batteries of different types.
- Never mix old batteries and new ones.
- Never try to charge the batteries, take them apart, or allow them to become shorted. Keep batteries away from flame and direct heat at all times.

- **Keep batteries out of the reach of small children. If swallowed, consult with your physician immediately.**

To replace batteries

■ fx-82SUPER

1. Press OFF to switch power off.
2. Remove the screws that hold the back cover in place, and then remove the cover.
3. Remove the old batteries.
4. Install new batteries with polarity in correct directions.
5. Replace the back cover and secure it in place with the screws.
6. Press AC ON to switch power on.

■**fx-250HA**

1. Press [OFF] to switch power off.
2. Remove the screws that hold the back cover in place, and then remove the cover.
3. Remove the old batteries by turning the battery compartment face down and lightly tapping the calculator.
4. Wipe off the surfaces of new batteries with a soft, dry cloth, and install the batteries with porarity in correct directions.
5. Replace the back cover and secure it in place with the screws.
6. Press [AC ON] to switch power on.

Note

The calculator automatically resets its memory whenever batteries are removed for longer than two or three minutes. The following are the initial settings of the calculator whenever its memory is reset.

- COMP mode
- DEG mode
- NORM1 mode
- Memory cleared
- Input buffer cleared

Important!

If you allow battery power to drop too low, memory contents may become corrupted or lost completely. Be sure to replace the battery as soon as you notice the display becoming dim.

6/SPECIFICATIONS

BASIC OPERATIONS

4 basic calculations, constants for $+/-/\times/\div/x^y/\sqrt[y]{x}$, parenthesis calculations and memory calculations.

BUILT-IN FUNCTIONS

Trigonometric/inverse trigonometric functions (with angle in degrees, radians or grads), hyperbolic/inverse hyperbolic functions, common/natural logarithms, exponential functions (common antilogarithms, natural antilogarithms), powers, roots, square roots, cube roots, squares, reciprocals, factorials, conversions of coordinate system (R→P, P→R), random numbers, π, permutations, combinations fractions and percentages.

STATISTICAL FUNCTIONS

Population standard deviation, sample standard deviation, arithmetic mean, sum of square value, sum of value and number of data.

CAPACITY

Entry/basic calculations

10-digit mantissa, or 10-digit mantissa plus 2-digit exponent up to $10^{\pm 99}$.

***Output accuracy**

± 1 in the 10th digit

Functions	Input range	
$\sin x$ $\cos x$ $\tan x$	(DEG) $\lvert x\rvert < 9\times10^{9}$° (RAD) $\lvert x\rvert < 5\times10^{7}\pi$rad (GRA) $\lvert x\rvert < 1\times10^{10}$grad	However, for tan x: $\lvert x\rvert \neq 90(2n+1)$: DEG $\lvert x\rvert \neq \pi/2(2n+1)$: RAD $\lvert x\rvert \neq 100(2n+1)$: GRA
$\sin^{-1}x$ $\cos^{-1}x$	$\lvert x\rvert \leqq 1$	
$\tan^{-1}$	$\lvert x\rvert < 1\times10^{100}$	
$\sinh x$ $\cosh x$	$\lvert x\rvert \leqq 230.2585092$	Note: For sinh and tanh, when $x=0$, errors are cumulative and accuracy is affected at a certain point.
$\tanh x$	$\lvert x\rvert < 1\times10^{100}$	

Functions	Input range
$\sinh^{-1}x$	$\|x\| < 5\times10^{99}$
$\cosh^{-1}x$	$1 \leqq x < 5\times10^{99}$
$\tanh^{-1}x$	$\|x\| < 1$
$\log x/\ln x$	$1\times10^{-99} \leqq x < 1\times10^{100}$
10^x	$-1\times10^{100} < x < 100$
e^x	$-1\times10^{100} < x \leqq 230.2585092$
$\sqrt{x}$	$0 \leqq x < 1\times10^{100}$
x^2	$\|x\| < 1\times10^{50}$
$1/x$	$\|x\| < 1\times10^{100}$, $x \neq 0$
$\sqrt[3]{x}$	$\|x\| < 1\times10^{100}$
$x!$	$0 \leqq x \leqq 69$ (x is an integer)
$n\,Pr$ $n\,Cr$	n, r (n and r are integers) $0 \leqq r \leqq n$, $n < 1\times10^{10}$
Pol (x, y)	$\sqrt{x^2+y^2} < 1\times10^{100}$
Rec (r, θ)	$0 \leqq r < 1\times10^{100}$ However, for tan θ: (DEG) $\|\theta\| < 9\times10^{9}$° $\|\theta\| \neq 90(2n+1)$: DEG (RAD) $\|\theta\| < 5\times10^{7}\pi$rad $\|\theta\| \neq \pi/2(2n+1)$: RAD (GRA) $\|\theta\| < 1\times10^{10}$grad $\|\theta\| \neq 100(2n+1)$: GRA
°′″	$\|a\|$, b, c $< 1\times10^{100}$, $0 \leqq$ b, c
°′″ ⟵	$\|x\| \leqq 2.777777777\times10^{96}$
x^y	$x>0$: $-1\times10^{100} < y\log x < 100$ $x=0$: $y>0$ $x<0$: $y=n$, $\frac{1}{2n+1}$ (n is an integer) However; $-1\times10^{100} < y\log\|x\| < 100$
$x^{1/y}$	$x>0$: $y\neq0$ $-1\times10^{100} < \frac{1}{y}\log x < 100$ $x=0$: $y>0$ $x<0$: $y=2n+1$, $\frac{1}{n}$ ($n\neq0$, n is an integer) However; $-1\times10^{100} < \frac{1}{y}\log\|x\| < 100$

Functions	Input range
$a^{b/c}$	•Results Total of integer, numerator and denominator must be within 10 digits (includes division marks). •Input Result displayed as fraction for integer when integer, numerator and denominator are less than 1×10^{10}.
SD	$\|x\| < 1\times10^{50}$ $\|n\| < 1\times10^{100}$ $x\sigma n$, $\bar{x}$: $n\neq0$ $x\sigma n-1$: $n\neq0$, 1

*Errors are cumulative with such internal continuous calculations as x^y, $x^{1/y}$, $x!$, $\sqrt[3]{\ }$ so accuracy may be adversely affected.

DECIMAL POINT

Full floating with underflow.

EXPONENTIAL DISPLAY

Norm 1 — $10^{-2} > |x|$, $|x| \geqq 10^{10}$

Norm 2 — $10^{-9} > |x|$, $|x| \geqq 10^{10}$

READ-OUT

Liquid crystal display, suppressing unnecessary 0's (zeros).

POWER SOURCE

•fx-82SUPER

Power source: Two AA size manganese dry batteries (UM-3 or R6P (SUM-3))

Battery life: The unit gives approximately 9,000 hours continuous operation on type UM-3 (11,000 hours on type R6P (SUM-3)).

Power consumption: 0.0004W

•fx-250HA

Power source: Two alkaline-manganese batteries (LR44 or SR44 (G-13))

Battery life: The unit gives approximately 750 hours continuous operation on type LR44 (1,820 hours on type SR44).

Power consumption: 0.0004W

AMBIENT TEMPERATURE RANGE

0°C – 40°C (32°F – 104°F)

DIMENSIONS

- **fx-82SUPER**
  23.6mmH × 78mmW × 158.5mmD
  ($^{7}/_{8}$"H × $3^{1}/_{8}$"W × $6^{1}/_{4}$"D)
- **fx-250HA**
  9.5mmH × 73mmW × 140mmD
  ($^{3}/_{8}$"H × $2^{7}/_{8}$"W × $5^{1}/_{2}$"D)

WEIGHT

- **fx-82SUPER** 150g (5.3 oz) including batteries
- **fx-250HA** 67g (2.4 oz) including batteries

Vorsichtsmaßnahmen bei der Handhabung

- Ihr Rechner ist aus Präzisionsteilen hergestellt. Daher niemals den Rechner zu zerlegen versuchen.
- Den Rechner nicht fallen lassen und keinen starken Stößen aussetzen.
- Den Rechner nicht an Orten mit hohen Temperaturen, hoher Luftfeuchtigkeit und Staub aufbewahren. Wenn der Rechner niedrigen Temperaturen ausgesetzt wird, kann für die Anzeige der Ergebnisse eine längere Zeit benötigt werden oder der Rechner kann überhaupt ausfallen. Richtiger Betrieb wird aber wieder sichergestellt, nachdem der Rechner wieder zurück auf Normaltemperatur gebracht wurde.
- Das Display verschwindet und die Tasten arbeiten nicht während der Rechnungen. Wenn Sie die Tastatur bedienen, unbedingt das Display beobachten, damit sichergestellt wird, daß alle Tastenoperationen richtig ausgeführt werden.
- Niemals verbrauchte Batterien in dem Batteriefach belassen. Die Batterien können auslaufen und den Rechner beschädigen.
- Niemals flüchtige Flüssigkeiten wie Verdünner oder Benzin für das Reinigen des Rechners verwenden. Den Rechner einfach mit einem weichen, trockenen Tuch oder mit einem in neutraler Waschmittellösung angefeuchteten und gut ausgewrungenen Tuch abwischen.
- Unter keinen Umständen ist der Hersteller und seine Zulieferanten Ihnen oder anderen Personen gegenüber verantwortlich für Schäden, Ausgaben, entgangene Gewinne, entgangene Einsparungen oder andere Schäden, die auf den Verlust von Daten und/oder Formeln aufgrund von Fehlbetrieb, Reparaturen oder Austausch der Batterien zurückzuführen sind. Den Anwender sollte schriftliche Kopien der Daten anfertigen, um gegen solche Datenverluste vorzubeugen.
- Niemals die Batterien, die Flüssigkristallanzeige und andere Komponenten verbrennen.
- Bevor Fehlbetrieb des Rechners angenommen wird, unbedingt diese Anleitung nochmals durchlesen und darauf achten, daß das Problem nicht auf zu niedrige Batteriespannung oder Bedienungsfehler zurückzuführen ist.

•**fx-250HA**

Fonte di alimentazione: Due pile alcaline (tipo LR44 o SR44 (G-13))

Durata delle pile: Circa 750 ore di funzionamento continuato con il tipo LR44 (1.820 ore con il tipo SR44)

Consumo: 0,0004 W

GAMMA DELLA TEMPERATURA DI IMPIEGO
0°C – 40°C

DIMENSIONI

•**fx-82SUPER** 23,6 × 78 × 158,5 mm (a/l/p)
•**fx-250HA** 9,5 × 73 × 140 mm (a/l/p)

PESO

•**fx-82SUPER** 150 g, pile comprese
•**fx-250HA** 67 g, pile comprese

7/NORMAL CALCULATIONS

*You can perform normal calculations in the COMP mode ([MODE] [0]).
*Calculations can be performed in the same sequence as the written formula (true algebraic logic).
*Nesting of up to 18 parentheses at 6 levels is allowed.

7/Normale Rechnungen

*Im COMP-Modus ([MODE] [0]) können Sie normale Berechnungen ausführen.
*Die Rechnungen können in der gleichen Reihenfolge wie die geschriebene Formel (tatsächliche Algebralogik) durchgeführt werden.
*Die Verschachtelung von bis zu 18 Klammern auf 6 Ebenen ist möglich.

7/CALCULS NORMAUX

*Les calculs normaux peuvent être effectués dans le mode COMP ([MODE] [0]).
*Les calculs peuvent être effectués dans le même ordre que la formule écrite (vraie logique algébrique).
*L'imbrication de 18 parenthèses en 6 niveaux est possible.

7/CALCULOS NORMALES

*Se pueden realizar cálculos normales en el modo COMP ([MODE] [0]).
*Los cálculos se pueden hacer en la misma secuencia de la fórmula introducida (lógica algebraica verdadera).
*Se permite el establecimiento de hasta 18 parentesis en 6 niveles.

7/CALCOLI NORMALI

*È possibile eseguire calcoli normali nel modo COMP ([MODE] [0]).
*I calcoli possono essere eseguiti nella stessa sequenza usata nella formula scritta (vera logica algebrica).
*Si possono aprire fino a 18 parentesi a 6 livelli.

7-1 Four basic calculations (incl. parenthesis calculations)

7-1 Vier Grundrechenarten (einschließlich Klammerausdrücke)

7-1 Quatre calculs élémentaires (y compris les calculs avec parenthèses)

7-1 Cuatro cálculos básicos (incluidos los cálculos con paréntesis)

7-1 I quattro calcoli base (calcoli tra parentesi compresi)

EXAMPLE	OPERATION	READ-OUT
BEISPIEL	BEDIENUNG	SICHTANZEIGE
EXEMPLE	OPERATION	AFFICHAGE
EJEMPLO	OPERACION	LECTURA
ESEMPIO	OPERAZIONE	LETTURA

$23+4.5-53=$

23 + 4 . 5 − 53 = → −25.5

$56\times(-12)\div(-2.5)=$

56 × 12 +/− ÷ 2 . 5 +/− = → 268.8

$2\div3\times(1\times10^{20})=$

2 ÷ 3 × 1 EXP 20 = → 6.666666667 19

$(2+3)\times10^{2}=$

(2 + 3) × 1 EXP 2 = → 500.

*The correct answer cannot be derived by entering (2 + 3) EXP 2. Be sure to enter × 1 between) and EXP in the above example.

*Die richtige Antwort kann durch Eingabe von (2 + 3) EXP 2 nicht erhalten werden. Unbedingt × 1 zwischen) und EXP in dem obigen Beispiel eingeben.

*La réponse correcte ne peut pas être obtenue en introduisant (2 + 3) EXP 2. Toujours introduire × 1 entre) et EXP dans l'exemple ci-dessus.

*La respuesta correcta no puede derivarse ingresando (2 + 3) EXP 2. Cerciórese de ingresar × 1 entre el) y EXP en el ejemplo anterior.

*La risposta corretta non può essere ottenuta immettendo (2 + 3) EXP 2. Accertarsi di immettere × 1 tra) e EXP nell'esempio di cui sopra.

$\underline{7\times8}-\underline{4\times5}=(56-20)=$

7 × 8 − 4 × 5 = → 36.

$1+2-\underline{3\times4}\div\underline{5}+6=$

1 + 2 − 3 × 4 ÷ 5 + 6 = → 6.6

$\dfrac{6}{4\times5}=$

4 × 5 ÷ 6 SHIFT x⇄y = → 0.3

*Be sure to press AC before starting any operation that involves the (key. This is especially true right after you finish performing calculations that are finalized without pressing = (such as scientific function calculations).
*The number of levels of the (key can be displayed.

*Unbedingt die AC Taste drücken, bevor eine Operation begonnen wird, die die (Taste verwendet. Dies trifft besonders dann zu, wenn Sie Rechnungen beenden, die ohne Drücken der = Taste abgeschlossen werden (wie z.B. Rechnungen mit wissenschaftlichen Funktionen).
*Die Anzahl der Klammerebenen, eingegeben mittels (Taste, kann angezeigt werden.

*Ne pas oublier d'appuyer sur AC avant de commencer une opération qui implique la touche [(•••)]. C'est particulièrement valable lorsque l'on termine des calculs qui sont finalisés sans appuyer sur [=] (tels les calculs des fonctions scientifiques).
*Le nombre de niveaux de la touche [(•••)] peut être affiché.

*Cerciórese de presionar AC antes de comenzar cualquier operación que relacióne la tecla [(•••)]. Esto es especialmente cierto luego de la realización de cálculos, que son finalizados sin presionar la tecla [=] (tal como los cálculos de funciones científicas).
*El número de niveles de la tecla [(•••)] puede presentarse en pantalla.

*Assicurarsi di premere AC prima di iniziare qualsiasi operazione che richieda l'uso del tasto [(•••)], in particolare subito dopo aver terminato di eseguire calcoli che vengono completati senza premere [=] (come i calcoli con funzioni scientifiche).
*Il numero dei livelli del tasto [(•••)] può essere visualizzato.

$2\times\{7+6\times(5+4)\}=$

2 × [(•••)]	[01 0.
7 + 6 × [(•••)]	[02 0.
5 + 4 [•••] [=]	122.

*It is unnecessary to press the [•••] key before the [=] key.

*Die [•••] Taste braucht nicht vor der [=] Taste gedrückt werden.

*Il est inutile d'appuyer sur la touche [•••] avant d'appuyer sur la touche [=].

*Es innecesario presionar la tecla [•••] antes de la tecla [=].

*Non è necessario premere il tasto [•••] prima del tasto [=].

$10-\{2+7\times(3+6)\}=$

10 − [(•••)] 2 + 7 × [(•••)] 3 + 6 [=]	−55.

Another operation:
Eine gleichwertige Bedienung:
Autre manière de faire:
Otra operación:
Un'altra operazione:

10 − [(•••)] 2 + 7 × [(•••)] 3 + 6 [•••] [•••] [=]

7-2 Constant calculations

*The "K" sign appears when a number is set as a constant.

7-2 Konstantenrechnungen

*Wenn eine Konstante eingestellt ist, erscheint das Symbol "K" in der Sichtanzeige.

7-2 Calculs avec constante

*Le signe "K" apparaît sur l'affichage quand un nombre est véglé comme constante.

7-2 Cálculos con constantes

*El signo "K" aparece cuando se establece una constante.

7-2 Calcoli con costanti

*Quando un numero viene posto come costante appare il simbolo "K".

$12+\underline{23}=$

$(-78)+\underline{23}=$

23 + + 12 [=]	K 35.
78 [+/−] [=]	K −55.

$2.3\times\underline{12}=$

$(-4.56)\times\underline{12}=$

12 × × 2 [•] 3 [=]	K 27.6
4 [•] 56 [+/−] [=]	K −54.72

$78 \div 9.6 =$

$45 \div 9.6 =$

9 ⊡ 6 ÷ ÷ 78 =	K 8.125
45 =	K 4.6875

$17 + 17 + 17 + 17 =$

17 + + =	K 34.
=	K 51.
=	K 68.

$1.7^2 =$
$1.7^3 =$
$1.7^4 =$

1 ⊡ 7 × × =	K 2.89
=	K 4.913
=	K 8.3521

$3 \times 6 \times 4 =$

$3 \times 6 \times (-5) =$

3 × 6 × ×	K 18.
4 =	K 72.
5 +/- =	K -90.

$$\frac{56}{4 \times (2+3)} =$$

$$\frac{23}{4 \times (2+3)} =$$

4 × (2 + 3) ÷ ÷	K 20.
56 =	K 2.8
23 =	K 1.15

7-3 Memory calculations

*Be careful not to set the function mode at "SD" when performing memory calculations.
*When a new number is entered into the memory by Min key, the previous number stored is automatically cleared and the new number is put in the memory.
*To clear the contents press 0 Min or AC Min in sequence.
*The "M" sign appears when a number is stored in the memory.

7-3 Speicherrechnungen

*Wenn Speicherrechnungen durchgeführt werden sollen, darf der Rechner nicht auf die Betriebsart "SD" geschaltet sein.
*Wird eine Zahl durch Drücken der Min Taste in den Speicher eingegeben, dann wird dadurch die früher in dem Speicher gespeicherte Zahl gelöscht, so daß nur die neue Zahl erhalten bleibt.
*Um den Speicherinhalt zu löschen, die Tasten 0 Min oder AC Min in dieser Reihenfolge drücken.
*Wenn eine Zahl im Speicher gespeichert ist, dann erscheint das Symbol "M" in der Sichtanzeige.

7-3 Calculs avec mémoire

*Lors de l'exécution de calculs avec mémoire, prendre garde à ne pas sélectionner le mode "SD".
*Quand un nouveau nombre est entré dans la mémoire par la touche Min, le nombre précédemment sauvegardé est automatiquement effacé.
*Pour effacer le contenu de la mémoire, appuyer dans l'ordre sur 0 Min ou AC Min.
*Le signe "M" est affiché quand un nombre est sauvegardé dans la mémoire.

7-3 Cálculos con memoria

*Cuidar de no ajustar el modo de función en la posición "SD" cuando se realicen cálculos con memoria.
*Al introducir un número en la memoria por medio de la tecla Min, el número almacenado anteriormente es borrado automáticamente y el nuevo número es introducido en la memoria.

*Para borrar el contenido, presionar [0] [Min] ó [AC] [Min] en esa secuencia.
*El signo "M" aparece cada vez que se almacena un número en la memoria.

7-3 Calcoli con la memoria

*Quando si eseguono calcoli con la memoria fare attenzione a non regolare il modo di funzione su "SD".
*Quando un nuovo numero viene registrato nella memoria per mezzo del tasto [Min], il numero precedentemente memorizzato viene automaticamente essere cancellato e solo il nuovo numero viene immesso in memoria.
*Per cancellare il contenuto della memoria premere [0] [Min] oppure [AC] [Min] in quest'ordine.
*Quando un numero viene memorizzato in memoria appare la lettera "M".

$53+6=$
$23-8=$
$56\times2=$
$+)\ 99\div4=$
210.75

53 [+] 6 [−] [Min]	M 59.
23 [−] 8 [M+]	M 15.
56 [×] 2 [M+]	M 112.
99 [÷] 4 [M+]	M 24.75
[MR]	M 210.75

$7+7-7+(2\times3)+(2\times3)+(2\times3)-(2\times3)=$

7 [Min] [M+] [SHIFT] [M−] 2 [×] 3 [M+] [M+] [M+] [SHIFT] [M−] [MR] → M 19.

$12\times3=$
$-)\ 45\times3=$
$78\times3=$
135

3 [×] [×] 12 [−] [Min]	M K 36.
45 [SHIFT] [M−]	M K 135.
78 [M+]	M K 234.
[MR]	M K 135.

*When the [X↔M] key is pressed after the [SHIFT] key, the displayed number is exchanged with the content of the memory.

*Wird die [X↔M] Taste nach der [SHIFT] Taste betätigt, dann wird die angezeigte Zahl mit dem Speicherinhalt vertauscht.

*Quand on appuie sur la touche [X↔M] après avoir appuyé sur la touche [SHIFT], le nombre affiché est échangé avec le contenu de la mémoire.

*Cuando se presiona la tecla [X↔M] luego de la tecla [SHIFT], el número en pantalla es intercambiado con el contenido de la memoria.

*Quando il tasto [X↔M] viene premuto dopo il tasto [SHIFT], il numero visualizzato viene scambiato con il contenuto della memoria.

$$\frac{(3+6)\times(2+5)}{\{2\times(3+4)\}+\{6\times(7+8)\}}=$$

[(] 3 [+] 6 [)] [×] [(] 2 [+] 5 [)] [−] [Min] → M 63.

2 [×] [(] 3 [+] 4 [)] [+] [(] 6 [×] [(] 7 [+] 8 [)] [)] [−] → M 104.

[SHIFT] [X↔M] [÷] [MR] [−] → M 0.6057692308

7-4 Fraction calculations

*Total of integer, numerator and denominator must be within 10 digits (includes division marks).
*A fraction can be transferred to the memory.
*When a fraction is extracted, the answer is displayed as a decimal.
*A press of [a b/c] key after the [=] key converts the fraction answer to the decimal scale.

7-4 Bruchrechnungen

*Gesamtzahl der Stellen für Ganzzahl, Zähler und Nenner muß innerhalb von 10 Stellen liegen (einschließlich Teilungszeichen).
*Auch ein Bruchausdruck kann im Speicher gespeichert werden.
*Wird die Wurzel aus einem Bruchausdruck gezogen, dann wird das Ergebnis als Dezimalzahl angezeigt.
*Wird die [a b/c] Taste nach der [=] Taste gedrückt, dann wird der Bruchausdruck in eine Dezimalzahl verwandelt.

7-4 Calculs de fraction

*Le total du chiffre entier, du numérateur et du dénominateur ne doit pas dépasser 10 chiffres (y compris les signes de division).
*Une fraction peut être transférée dans la mémoire.
*Quand une fraction est extraite, la réponse est affichée comme un nombre décimal.
*Une pression sur la touche [a b/c] après la touche [=] convertit la réponse fractionnelle à l'échelle décimale.

7-4 Cálculos de fracciones

*Total de números enteros, numerador y denominador deben estar dentro de 10 dígitos (incluyendo las marcas de división).
*Una fracción puede ser transferida a la memoria.
*Cuando se extrae una fracción, la respuesta es presentada como decimal.
*La pulsación la tecla [a b/c] después de la tecla [=], convierte las fracciones a la escala decimal.

7-4 Calcoli frazionari

*Il totale della parte intera, del numeratore e del denominatore deve avere meno di 10 cifre (compresi i segni di divisione).
*Le frazioni possono essere memorizzate.
*Quando una frazione viene estratta, la risposta viene visualizzata come decimale.
*La pressione del tasto [a b/c] dopo il tasto [=] converte la risposta frazionaria nella scala decimale.

$4\frac{5}{6} \times (3\frac{1}{4} + 1\frac{2}{3}) \div 7\frac{8}{9} =$

4 a b/c 5 a b/c 6 × (3 a b/c 1 a b/c 4 + 1 a b/c 2 a b/c 3) ÷ 7 a b/c 8 a b/c 9 =	3⌟7⌟568.
a b/c	3.012323944
a b/c	3⌟7⌟568.

$2\frac{4}{5} + \frac{3}{4} - 1\frac{1}{2} =$

2 a b/c 4 a b/c 5 + 3 a b/c 4 =	3⌟11⌟20.
a b/c	3.55
1 a b/c 1 a b/c 2 =	2⌟1⌟20.

$(1.5 \times 10^7) - \{(2.5 \times 10^6) \times \frac{3}{100}\} =$

1 . 5 EXP 7 − 2 . 5 EXP 6 × 3 a b/c 100 =	14925000.

*During a fraction calculation, a figure is reduced to the lowest terms by pressing a function command key (+, −, × or ÷) or the [=] key if the figure is reducible.

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*Bei Bruchrechnungen wird jeder Bruchausdruck auf den kleinsten Nenner gekürzt, wenn eine der Rechenbefehltasten (+, −, ×, oder ÷) bzw. die = Taste gedrückt wird.

*Pendant un calcul de fraction, un chiffre est réduit, s'il est réductible, aux termes les plus bas en appuyant sur une touche de commande de fonction (+, −, ×, ÷) ou sur la touche =.

*Durante un cálculo de fracción, una cifre es reducida a los términos mínimos al presionar una tecla de comando de función (+, −, × ó ÷) o la tecla = si la cifra es reducible.

*Durante i calcoli con le frazioni, le cifre vengono ridotte ai minimi termini premendo il tasto di un comando di funzione (+, −, × o ÷) oppure il tasto =, sempreché la cifra sia riducibile.

$3\frac{456}{78} = 8\frac{11}{13}$ (Reduction) (Kürzung) (Réduction) (Reducción) (riduzione)

3 a⅞ 456 a⅞ 78	3⌟456⌟78.
=	8⌟11⌟13.

*By pressing SHIFT d/c continuously, the displayed value will be converted to the improper fraction.

*Werden die Tasten SHIFT d/c gedrückt gehalten (kontinuierlich), dann wird der angezeigte Wert in einen fehlerhaften Bruchausdruck verwandelt.

*Si on appuie sur SHIFT d/c continuellement, la valeur affichée sera convertie en une fraction non inférieure à l'unité.

*Presionando las teclas SHIFT d/c continuamente, el valor presentado será convertido a la fracción impropia.

*Premendo SHIFT d/c di seguito, il valore visualizzato viene convertito in una frazione impropria.

Continuing from above
Fortsetzung von oben
Suite
Continuación desde arriba
Continuando da sopra

SHIFT d/c	115⌟13.

$\frac{12}{45} - \frac{32}{56} =$

12 a⅞ 45 −	4⌟15.
32 a⅞ 56 =	−32⌟105.

*The answer in a calculation performed between a fraction and a decimal is displayed as a decimal.

*Das Ergebnis einer Rechnung, bei der Bruchausdrücke und Dezimalzahlen verwendet werden, wird als Dezimalzahl angezeigt.

*La réponse à un calcul exécuté entre une fraction et un nombre décimal est affiché comme un nombre décimal.

*La respuesta de un cálculo realizado entre una fracción y un decimal aparece como decimal.

*La risposta in un calcolo eseguito tra una frazione ed un decimale viene visualizzata come decimale.

$\frac{41}{52} \times 78.9 =$

41 a⅞ 52 ×	41⌟52.
78 • 9 =	62.20961538

7-5 Percentage calculations
7-5 Prozentrechnungen
7-5 Calculs avec pourcentages
7-5 Cálculos con porcentajes
7-5 Calcoli di percentuale

12% of 1500
12% von 1500
12% de 1500
12% de 1500
12% di 1500

1500 × 12 SHIFT %	180.

Percentage of 660 against 880
660 ist wieviel Prozent von 880?
Pourcentage de 660 par rapport à 880
Porcentaje de 660 contra 880
Percentuale di 660 in rapporto a 880

660 ÷ 880 SHIFT % → 75.

15% add-on of 2500
15% Aufschlag auf 2500
15% de prime sur 2500
15% de aumento de 2500
15% di aumento su 2500

2500 × 15 SHIFT % + → 2875.

25% discount of 3500
25% Abschlag von 3500
25% de remise sur 3500
25% de descuento de 3500
25% di sconto su 3500

3500 × 25 SHIFT % − → 2625.

300cc is added to a solution of 500cc. What is the percent of the new volume to the initial one?

Eine Lösung 500cm^3 wird mit 300cm^3 verdünnt. Berechne das neue Volumen in Prozent des ursprünglichen Volumens.

300cm^3 sont ajoutés à une solution de 500cm^3. Quel est le pourcentage du nouveau volume par rapport au volume initial?

Se agregan 300cc a una solución de 500cc. ¿Cuál es el porcentaje del nuevo volumen con respecto al primero?

Se si aggiungono 300 cc ad una soluzione di 500 cc, qual è la percentuale del nuovo volume rispetto a quello iniziale?

300 + 500 SHIFT % → 160. (%)

If you made $80 last week and $100 this week, what is the percent increase?

Berechne die Zunahme, wenn der Umsatz in der letzten Woche $80 und in dieser Woche $100 betrug.

Si vous avez gagné $80 la semaine dernière et $100 cette semaine, que est le pourcentage de l'augmentation?

Si Ud. ganó $80 la semana pasada y $100 esta semana. ¿Cuál es el porcentaje de suba?

Se si sono guadagnati $80 la scorsa settimana e $100 questa settimana, qual è la percentuale di aumento?

100 − 80 SHIFT % → 25. (%)

12% of 1200 | 12% von 1200 | 12% de 1200
18% of 1200 | 18% von 1200 | 18% de 1200
23% of 1200 | 23% von 1200 | 23% de 1200

12% de 1200 | 12% di 1200
18% de 1200 | 18% di 1200
23% de 1200 | 23% di 1200

1200 × × 12 SHIFT % → K 144.
18 SHIFT % → K 216.
23 SHIFT % → K 276.

26% of 2200 | 26% von 2200 | 26% de 2200
26% of 3300 | 26% von 3300 | 26% de 3300
26% of 3800 | 26% von 3800 | 26% de 3800

26% de 2200 | 26% di 2200
26% de 3300 | 26% di 3300
26% de 3800 | 26% di 3800

26 × × 2200 SHIFT % → K 572.
3300 SHIFT % → K 858.
3800 SHIFT % → K 988.

Percentage of 30 against 192
Percentage of 156 against 192

30 ist wieviel Prozent von 192?
156 ist wieviel Prozent von 192?

Pourcentage de 30 par rapport à 192
Pourcentage de 156 par rapport à 192

Porcentaje de 30 contra 192
Porcentaje de 156 contra 192

Percentuale di 30 in rapporto a 192
Percentuale di 156 in rapporto a 192

192 ÷ 30 SHIFT %	K 15.625
156 SHIFT %	K 81.25

*600 grams was added to 1200 grams. What percent is the total to the initial weight?
*510 grams was added to 1200 grams. What percent is the total to the initial weight?

*Zu einer Masse von 1200 Gramm werden 600 Gramm dazugegeben. Berechne die Endmasse in Prozent der ursprünglichen Masse.
*Zu einer Masse von 1200 Gramm werden 510 Gramm dazugegeben. Berechne die Endmasse in Prozent der ursprünglichen Masse.

*600 g sont ajoutés à 1200 g. Quel est le pourcentage du poids total par rapport au poids initial?
*510 g sont ajoutés à 1200 g. Quel est le pourcentage du poids total par rapport au poids initial?

*Se agregan 600 gramos a 1200 gramos. ¿Cuál es el porcentaje del peso total con respecto al inicial?
*Se agregan 510 gramos a 1200 gramos. ¿Cuál es el porcentaje del peso total con respecto al inicial?

*Se si aggiungono 600 grammi a 1200 grammi qual è la percentuale del peso totale rispetto a quello iniziale?
*Se si aggiungono 510 grammi a 1200 grammi qual è la percentuale del peso totale rispetto a quello iniziale?

1200 + 600 SHIFT %	K 150.
510 SHIFT %	K 142.5

*How many percent down is 138 grams to 150 grams?
*How many percent down is 129 grams to 150 grams?

*Berechne die Abnahme von 150 Gramm auf 138 Gramm.
*Berechne die Abnahme von 150 Gramm auf 129 Gramm.

*Quel est le pourcentage de la diminution de 150 g par rapport à 138 g?
*Quel est le pourcentage de la diminution de 150 g par rapport à 129 g?

*¿Cuál es el porcentaje de disminución de 138 gramos con respecto a 150 gramos?
*¿Cuál es el porcentaje de disminución de 129 gramos con respecto a 150 gramos?

*Qual è la percentuale di diminuzione di 138 grammi rispetto a 150 grammi?
*Qual è la percentuale di diminuzione di 129 grammi rispetto a 150 grammi?

150 − 138 SHIFT %	K −8.
129 SHIFT %	K −14.

8/FUNCTION CALCULATIONS

Scientific function keys can be utilized as subroutines of four basic calculations (including parenthesis calculations).

*This calculator computes as $\pi = 3.141592654$ and $e = 2.718281828$.
*In some scientific functions, the display disappears momentarily while complicated formulas are being processed. So do not enter numerals or press the function key until the previous answer is displayed.
*For each input range of the scientific functions, see page 15.

8/Funktionsrechnungen

Die technisch/wissenschaftlichen Funktionen können für Zwischenrechnungen in den vier Grundrechenarten verwendet werden (einschließlich Klammerausdrücke).

*Dieser Rechner rechnet mit $\pi = 3,141592654$ und $e = 2,718281828$.

*Bei manchen technisch/wissenschaftlichen Funktionen verschwindet die Anzeige für einige Sekunden, wenn komplizierte Rechnungen durchgeführt werden. Eingaben von Daten oder Rechenbefehlen dürfen erst durchgeführt werden, nachdem das vorhergehende Ergebnis angezeigt wird.

*Die Eingabebereiche für die wissenschaftlichen Funktionen sind auf Seite 32 aufgeführt.

8/CALCULS DE FONCTION

Les touches de fonction scientifique peuvent être utilisées comme sous-programmes des quatre calculs élémentaires (y compris les calculs avec parenthèses).

*Cet appareil calcule avec $\pi = 3,141592654$ et $e = 2,718281828$.

*Avec certaines fonctions scientifiques, l'affichage disparaît momentanément tandis que des formules compliquées sont traitées. Il ne faut donc pas entrer de nombre ou appuyer sur une touche de fonction tant que la réponse précédente n'est pas affichée.

*Pour la gamme d'entrée de chacune des fonctions scientifiques, voir page 51.

8/CALCULOS DE FUNCIONES

Las teclas de las funciones científicas pueden ser empleadas como subrutinas en cualquiera de los cuatro cálculos básicos (incluyendo los cálculos entre paréntesis).

*Esta calculadora computa como $\pi = 3,141592654$ y $e = 2,718281828$.

*En algunas de las funciones científicas, la presentación en pantalla desaparece por algún instante mientras se están procesando fórmulas complejas, de manera que no se deben entrar numerales o presionar otras teclas de funciones hasta que aparezca la respuesta previa.

*Remitirse a la página 69 para cada gama de entrada de las funciones científicas.

8/CALCOLI DI FUNZIONE

I tasti delle funzioni scientifiche possono essere utilizzati come una sottoroutine dei quattro calcoli base (calcoli con le parentesi compresi).

*Questa calcolatrice computa come $\pi = 3,141592654$ e come $e = 2,718281828$.

*In alcune funzioni scientifiche, la visualizzazione scompare momentaneamente durante lo svolgersi di alcune formule complicate. Per questo motivo non immettere numerali e non premere tasti di funzione fino a che non compare il risultato.

*Per ogni serie immessa di funzioni scientifiche, vedere pagina 87.

8-1 Sexagesimal ↔ Decimal conversion

The [o'''] key converts the sexagesimal figure (degree, minute and second) to decimal notation. Operation of [SHIFT] [o'''] converts the decimal notation to the sexagesimal notation.

8-1 Sexagesimalsystem ↔ Dezimalsystem Umwandlung

Die [o'''] Taste dient für die Umwandlung einer Sexagesimalzahl (Winkelgrad, Minuten und Sekunden) in eine Dezimalzahl Werden die Tasten [SHIFT] [o'''] in dieser Reihenfolge gedrückt, dann wird die Dezimalzahl in eine Sexagesimalzahl verwandelt.

8-1 Conversion sexagésimal ↔ décimal

La touche [o'''] convertit le nombre sexagésimal (degrés, minutes et secondes) en notation décimale. L'appui sur [SHIFT] [o'''] convertit la notation décimale en notation sexagésimale.

8-1 Conversión sexagesimal ↔ decimal

La tecla [o'''] convierte una cifra sexagesimal (grados, minutos y segundos) a notación decimal. Al operar [SHIFT] [o'''] se convierte la notación decimal en sexagesimal.

8-1 Conversione sessagesimale ↔ decimale

Il tasto [o'''] converte la cifra sessagesimale (gradi, minuti e secondi) alla notazione decimale. L'operazione [SHIFT] [o'''] converte la notazione decimale alla notazione sessagesimale.

$14°25'36'' =$

14 [o''']	14.
25 [o''']	14.41666667
36 [o''']	14.42666667
[SHIFT] [o''']	14°25°36.

8-2 Trigonometric / Inverse trigonometric functions

8-2 Trigonometrische Funktionen / trigonometrische Umkehrfunktionen

8-2 Fonctions trigonométriques / trigonométriques inverses

8-2 Funciones trigonométricas y trigonométricas inversas

8-2 Funzioni trigonometriche / trigonometriche inverse

$\sin(\frac{\pi}{6}\text{rad}) =$

"RAD" ([MODE] [5])

[π] [÷] 6 [=] [sin] → 0.5

$\cos 63°52'41'' =$

"DEG" ([MODE] [4])

63 [o'''] 52 [o'''] 41 [o'''] → 63.87805556

[cos] → 0.440283084

$\tan(-35\,\text{gra}) =$

"GRA" ([MODE] [6]) 35 [+/−] [tan] → −0.612800788

$2 \cdot \sin 45° \times \cos 65° =$

"DEG"

2 [×] 45 [sin] [×] 65 [cos] [=] → 0.597672477

$\cot 30° = \frac{1}{\tan 30°} =$

"DEG" 30 [tan] [SHIFT] [1/x] → 1.732050808

$\sec(\frac{\pi}{3}\text{rad}) = \frac{1}{\cos(\frac{\pi}{3}\text{rad})} =$

"RAD" [π] [÷] 3 [=] [cos] [SHIFT] [1/x] → 2.

$\text{cosec}\,30° = \frac{1}{\sin 30°} =$

"DEG" 30 [sin] [SHIFT] [1/x] → 2.

$\cos^{-1}\frac{\sqrt{2}}{2} =$

"RAD" 2 [√] [÷] 2 [=] [SHIFT] [cos] → 0.785398163

$\tan^{-1}0.6104 =$

"DEG" [·] 6104 [SHIFT] [tan] → 31.39989118

[SHIFT] [o'''] → 31°23°59.61

8-3 Hyperbolic functions and inverse hyperbolic functions

8-3 Hyperbelfunktionen und Areafunktionen

8-3 Fonctions hyperboliques et fonctions hyperboliques inverses

8-3 Funciones hiperbólicas y funciones hiperbólicas inversas

8-3 Funzioni iperboliche e funzioni iperboliche inverse

$\sinh 3.6 =$ 3 [•] 6 [hyp] [sin] | 18.28545536

$\tanh 2.5 =$ 2 [•] 5 [hyp] [tan] | 0.986614298

$\cosh 1.5 - \sinh 1.5 =$

1 [•] 5 [Min] [hyp] [cos] [−] | M 2.352409615

[MR] [hyp] [sin] [=] | M 0.22313016

[ln] | M −1.5

$\sinh^{-1} 30 =$ 30 [SHIFT] [hyp] [sin] | 4.094622224

Solve $\tanh 4x = 0.88$.
Berechne $\tanh 4x = 0{,}88$.
Résoudre $\tanh 4x = 0{,}88$.
Solucionar $\tanh 4x = 0{,}88$.
Risolvere $\tanh 4x = 0{,}88$.

$$x = \frac{\tanh^{-1} 0.88}{4} =$$

[•] 88 [SHIFT] [hyp] [tan] [÷] 4 [=] | 0.343941914

8-4 Common & Natural logarithms / Exponentiations (Common antilogarithms, Natural antilogarithms, Powers and Roots)

8-4 Briggsscher und natürlicher Logarithmus / Exponentialrechnungen (Briggsscher Antilogarithmus, natürlicher Antilogarithmus, Potenzen und Wurzeln)

8-4 Logarithmes décimaux et népériens / élévations à une puissance (cologarithmes décimaux, cologarithmes népériens, puissances et racines)

8-4 Logaritmos comunes y naturales / exponenciaciones (Antilogaritmos comunes, Antilogaritmos naturales, Potencias y Raíces)

8-4 Logaritmi comuni e naturali / esponentizzazione (antilogaritmi comuni, antilogaritmi naturali, potenze e radici)

$\log 1.23 (= \log_{10} 1.23) =$

1 [•] 23 [log] | 0.089905111

Solve $4^x = 64$.
Berechne $4^x = 64$.
Résoudre $4^x = 64$.
Solucionar $4^x = 64$.
Risolvere $4^x = 64$.

$x \cdot \log 4 = \log 64$

$$x = \frac{\log 64}{\log 4}$$

64 [log] [÷] 4 [log] [=] | 3.

$\ln 90\ (=\log_e 90) =$

90 [ln] | 4.49980967

$\log 456 \div \ln 456 =$

456 [Min] [log] [÷] [MR] [ln] [=] | M 0.434294481

$10^{1.23} =$ 1 [.] 23 [SHIFT] [10^x] | 16.98243652

(To obtain the anti-logarithm of common logarithm 1.23)
(Berechnung des Antilogarithmus des Briggsschen Logarithmus von 1,23)
(Pour obtenir l'antilogarithme du logarithme ordinaire 1,23)
(Para obtener el antilogaritmo del logaritmo común 1,23)
(Per ottenere l'antilogaritmo del logaritmo comune 1,23)

$e^{4.5} =$ 4 [.] 5 [SHIFT] [e^x] | 90.0171313

(To obtain the anti-logarithm of natural logarithm 4.5)
(Berechnung des Antilogarithmus des natürlichen Logarithmus von 4,5)
(Pour obtenir l'antilogarithme du logarithme naturel 4,5)
(Para obtener el antilogaritmo del logaritmo natural 4,5)
(Per ottenere l'antilogaritmo del logaritmo naturale 4,5)

$10^{0.4} + 5 \cdot e^{-3} =$

[.] 4 [SHIFT] [10^x] [+] 5 [×] 3 [+/-]
[SHIFT] [e^x] [=] | 2.760821773

$5.6^{2.3} =$

5 [.] 6 [SHIFT] [x^y] 2 [.] 3 [=] | 52.58143837

$123^{1/7}\ (=\sqrt[7]{123}) =$

123 [SHIFT] [$\sqrt[x]{y}$] 7 [=] | 1.988647795

$4^{2.5} =$
$0.16^{2.5} =$
$9^{2.5} =$

2 [.] 5 [SHIFT] [x^y] [SHIFT] [x^y] 4 [=] | 32.
[.] 16 [=] | 0.01024
9 [=] | 243.

$(78 - 23)^{-12} =$

[(-)] 78 [−] 23 [(-)] [SHIFT] [x^y] 12 [+/-]
[=] | 1.305111829^{-21}

$3^{12} + e^{10} =$

3 [SHIFT] [x^y] 12 [+] 10 [SHIFT] [e^x] [=] | 553467.4658

$\log \sin 40° + \log \cos 35° =$

"DEG"
40 [sin] [log] [+] 35 [cos] [log] [=] | −0.278567983
[SHIFT] [10^x] | 0.526540784

(The antilogarithm ..... 0.526540784)
(Der Antilogarithmus..... 0,526540784)
(Le cologarithme ..... 0,526540784)
(El antilogaritmo ..... 0,526540784)
(L'antilogaritmo ..... 0,526540784)

$15^{1/5} + 25^{1/6} + 35^{1/7} =$

15 [SHIFT] [$\sqrt[x]{y}$] 5 [+] 25 [SHIFT] [$\sqrt[x]{y}$] 6
[+] 35 [SHIFT] [$\sqrt[x]{y}$] 7 [=] | 5.090557037

8-5 Square roots, Cube roots, Squares, Reciprocals & Factorials

8-5 Quadratwurzeln, Kubikwurzeln, Quadrate, Kehrwerte und Fakultäten

8-5 Racines carrées, racines cubiques, carrés, inverses et factorielles

8-5 Raíces cuadradas, Raíces cúbicas, Cuadrados, Recíprocos y Factoriales

8-5 Radici quadrate, radici cubiche, quadrati, reciproci e fattoriali

$\sqrt{2}+\sqrt{3}\times\sqrt{5}=$

2 √ + 3 √ × 5 √ =	5.287196909

$\sqrt[3]{5}+\sqrt[3]{-27}=$

5 SHIFT ∛ + 27 +/- SHIFT ∛ =	−1.290024053

$123+30^2=$

123 + 30 SHIFT x^2 =	1023.

$$\frac{1}{\frac{1}{3}-\frac{1}{4}}=$$

3 SHIFT 1/x − 4 SHIFT 1/x = SHIFT 1/x	12.

$8!(=1\times2\times3\times.....\times7\times8)=$

8 SHIFT x!	40320.

8-6 Miscellaneous functions (FIX, SCI, NORM, RND, RAN#, ENG)

8-6 Verschiedene Funktionen (FIX, SCI, NORM, RND, RAN#, ENG)

8-6 Fonctions diverses (FIX, SCI, NORM, RND, RAN#, ENG)

8-6 Funciones varias (FIX, SCI, NORM, RND, RAN#, ENG)

8-6 Altre funzioni (FIX, SCI, NORM, RND, RAN#, ENG)

$1.234+1.234=$

"FIX2" (MODE 7 2)

1 . 234 +	FIX 1.23
1 . 234 =	FIX 2.47
MODE 9	2.468

"FIX2"

1 . 234 SHIFT RND +	FIX 1.23
1 . 234 SHIFT RND =	FIX 2.46
MODE 9	2.46

$1\div3+1\div3=$

"SCI2" (MODE 8 2)

1 ÷ 3 +	SCI 3.3^{-01}
1 ÷ 3 =	SCI 6.7^{-01}
MODE 9	0.666666666

"SCI2"

[...] 1 [÷] 3 [...] [SHIFT] [RND] [+]	SCI 3.3^{-01}
[...] 1 [÷] 3 [...] [SHIFT] [RND] [=]	SCI 6.6^{-01}
[MODE] [9]	0.66

$1 \div 1000 = 0.001$
$= 1 \times 10^{-3}$

(Norm 1) 1 [÷] 1000 [=]	1.$^{-03}$
(Norm 2) [MODE] [9]	0.001

$123\text{m} \times 456$
$= 56088\text{m}$
$= 56.088\text{km}$

123 [×] 456 [=]	56088.
[ENG]	56.088 03

$78\text{g} \times 0.96$
$= 74.88\text{g}$
$= 0.07488\text{kg}$

78 [×] 0.96 [=]	74.88
[SHIFT] [ENG]	0.07488 03

Generate a random number between 0.000 and 0.999.
Rufe eine Zufallszahl zwischen 0,000 und 0,999 ab.
Générer un nombre aléatoire entre 0,000 et 0,999.
Generar un número al azar entre 0,000 y 0,999.
Generare un numero casuale tra 0,000 e 0,999.

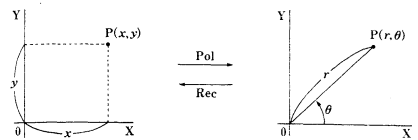
[SHIFT] [RAN#]	0.570

(Example) (Beispiel)
(Exemple) (Ejemplo)
(Esempio)

8-7 Coordinate transformation
8-7 Koordinatenumwandlung
8-7 Transformation de coordonnées
8-7 Transformación de coordenadas
8-7 Trasformazione di coordinate

- Rectangular coordinates
- Rechtwinkelige Koordinaten
- Coordonnées rectangulaires
- Coordenadas rectangulares
- Coordinate cartesiane

- Polar coordinates
- Polare Koordinaten
- Coordonnées polaires
- Coordenadas polares
- Coordinate polari



- With polar coordinates, θ can be calculated within a range of $-180° < \theta \leqq 180°$. (Calculation range is the same with radians or grads.)
- Bei polaren Koordinaten kann θ in einem Bereich von $-180° < \theta \leqq 180°$ berechnet werden. (Der Berechnungsbereich ist gleich für Bogenmaß oder Neugrad).
- Avec des coordonnées polaires, θ peut être calculé dans une gamme de $-180° < \theta \leqq 180°$. (La gamme de calcul est la même avec des radians ou des grades.)
- Con las coordenadas polares, θ puede calcularse dentro de una gama de $-180° < \theta \leqq 180°$. (La gama de cálculo es la misma tanto con radianes como con grados.)
- Con le coordinate polari, θ può essere calcolato entro una gamma di $-180° < \theta \leqq 180°$. (La gamma di calcolo è la stessa con radianti o gradienti.)

If $x = 14$ and $y = 20.7$, what are r and $\theta°$?

Berechne r und $\theta°$ für $x = 14$ und $y = 20{,}7$

Si $x = 14$ et $y = 20{,}7$, quelles sont les valeurs de r et $\theta°$?

Si $x = 14$ e $y = 20{,}7$ ¿cómo son r y $\theta°$?

Se $x = 14$ e $y = 20{,}7$, quali sono i valori per r e $\theta°$?

"DEG"

14 SHIFT R→P 20 , 7 = | 24.98979792 |
|---|
| (r) |

(Continuing) SHIFT X↔Y SHIFT °'" | 55°55°42.2 |
|---|
| (θ) |

(Fortsetzung)
(En continuant)
(Continuando)
(Continuando)

If $r = 25$ and $\theta = 56°$, what are x and y?

Berechne x und y für $r = 25$ und $\theta = 56°$

Si $r = 25$ et $\theta = 56°$, quelles sont les valeurs de x et y?

Si $r = 25$ y $\theta = 56°$, ¿cómo son x e y?

Se $r = 25$ e $\theta = 56°$, quali sono i valori per x e y?

"DEG" 25 SHIFT P→R 56 = | 13.97982259 |
|---|
| (x) |

(Continuing) SHIFT X↔Y | 20.72593931 |
|---|
| (y) |

(Fortsetzung)
(En continuant)
(Continuando)
(Continuando)

8-8 Permutations
8-8 Variationen
8-8 Permutations
8-8 Permutaciones
8-8 Permutazioni

Input range: $n \geqq r$ (n, r: natural numbers)

Eingabebereich: $n \geqq r$ (n, r: natürliche Zahlen)

Gamme d'entrée: $n \geqq r$ (n, r: entiers naturels)

Gama de entrada: $n \geqq r$ (n, r: números naturales)

Gamma di immissione: $n \geqq r$ (n, r: numeri naturali)

Formula / Formel / Formule / Fórmula / Formula

$$nPr = \frac{n!}{(n-r)!}$$

Ex.)
How many numbers of 4 figures can be obtained when permuting 4 different numbers among 7 (1 to 7)?

Beispiel)
Berechne die Anzahl der möglichen Variationen von vier Zahlen aus sieben möglichen Zahlen (1 bis 7)

Ex.)
Combien de nombres de 4 chiffres peuvent être obtenus en permutant 4 nombres différents parmi 7 (1 à 7)?

Ej.)
¿Cuántos números de cuatro dígitos pueden ser obtenidos cuando se permutan cuatro números diferentes de entre siete (1 a 7)?

Es.)
Quanti numeri di 4 cifre possono essere ottenuti permutando 4 numeri differenti tra 7 (da 1 a 7)?

7 SHIFT nPr 4 = | 840. |
|---|

8-9 Combinations
8-9 Kombinationen
8-9 Combinaisons
8-9 Combinaciones
8-9 Combinazioni

Input range: $n \geqq r$ (n, r: natural numbers)

Eingabebereich: $n \geqq r$ (n, r: natürliche Zahlen)

Gamme d'entrée: $n \geqq r$ (n, r: entiers naturels)

Gama de entrada: $n \geqq r$ (n, r: números naturales)

Gamma di immissione: $n \geqq r$ (n, r: numeri naturali)

Formula / Formel / Formule / Fórmula / Formula

$$nCr = \frac{n!}{r!\,(n-r)!}$$

Ex.)
How many groups of 4 members can be obtained when there are ten in class?

Beispiel)
Berechne die Anzahl der möglichen Kombinationen von 4 Elementen aus einer Gesamtzahl von 10.

Ex.)
Combien de groupes de 4 membres peuvent être obtenus quand ils sont dix en classe?

Ej.)
¿Cuántos grupos de cuatro miembros pueden ser obtenidos cuando hay diez de una clase?

Es.)
Quanti gruppi di 4 numeri possono essere ottenuti quando ce ne sono dieci nella classe?

10 [SHIFT] [nCr] 4 [=] **210.**

9/STANDARD DEVIATIONS

*It is necessary to set the function mode to "SD" by pressing [MODE] [•] in sequence.
*Be sure to press [SHIFT] [SAC] in sequence prior to starting a calculation.

9/Standardabweichung

*Der Rechner muß durch Drücken der Tasten [MODE] [•] in dieser Reihenfolge auf die Betriebsart "SD" geschaltet werden.
*Vor Beginn der statistischen Rechnungen unbedingt die Tasten [SHIFT] [SAC] in dieser Reihenfolge drücken.

9/ECART-TYPE

*Il est nécessaire de sélectionner le mode "SD" en appuyant dans l'ordre sur [MODE] [•].
*Avant de commencer un calcul, ne pas oublier d'appuyer dans l'ordre sur [SHIFT] [SAC].

9/DESVIACIONES ESTANDAR

*Es necesario ajustar el modo de función en "SD" presionando [MODE] [•] en esa secuencia.
*Asegurarse de presionar [SHIFT] [SAC] en esa secuencia antes de comenzar los cálculos.

9/DEVIAZIONE STANDARD

*È necessario regolare il modo di funzione su "SD" premendo [MODE] [•] in quest'ordine.
*Fare attenzione a premere [SHIFT] [SAC] in quest'ordine prima di cominciare i calcoli.

Standard deviation and mean calculations are performed as shown below:

Die Berechnungen der Standardabweichung und des Durchschnittswertes werden wie folgt durchgeführt:

Les calculs d'écart type et de moyenne sont effectués comme indiqué ci-dessous:

La desviación estándar y cálculos de media se realizan tal como se muestra debajo:

I calcoli di deviazione standard e media sono eseguiti come mostrato qui sotto:

- **Standard deviation**
- **Standardabweichung**
- **Ecart-type**
- **Desviación estándar**
- **Deviazione standard**

$$\sigma_n = \sqrt{\frac{\sum_{i=1}^{n} (x_i - \bar{x})^2}{n}} = \sqrt{\frac{\Sigma x^2 - (\Sigma x)^2/n}{n}}$$

Using the entire data of a finite population to estimate the standard deviation for the population.

Verwendung der gesamten Daten einer endlichen Population für die Schätzung der Standardabweichung für die Population.

En utilisant toutes les données d'une population limitée pour estimer l'écart type de cette population.

Uso de los datos ingresados de una población infinita para estimar la desviación estándar para la población.

Uso di tutti i dati di una popolazione finita per stimare la deviazione standard della popolazione.

$$\sigma_{n-1} = \sqrt{\frac{\sum_{i=1}^{n} (x_i - \bar{x})^2}{n-1}} = \sqrt{\frac{\Sigma x^2 - (\Sigma x)^2/n}{n-1}}$$

Using sample data for a population to estimate the standard deviation for the population.

Verwendung von Stichprobendaten für eine Population für die Schätzung der Standardabweichung für die Population.

En utilisant des données échantillon pour une population afin d'estimer l'écart type de cette population.

Uso de los datos de muestra de una población para estimar la desviación estándar para la población.

Uso dei dati campione di una popolazione per stimare la deviazione standard della popolazione.

- **Mean**
- **Durchschnittswert**
- **Moyenne**
- **Media**
- **Media**

$$\bar{x} = \frac{\sum_{i=1}^{n} x_i}{n} = \frac{\Sigma x}{n}$$

Ex.)
Find $\sigma n-1$, σn, $\bar{x}$, n, Σx and Σx^2 based on the data: 55, 54, 51, 55, 53, 53, 54, 52.

Beispiel)
Die Werte $\sigma n-1$, σn, $\bar{x}$, n, Σx und Σx^2 sind für die Daten: 55, 54, 51, 55, 53, 53, 54 und 52 zu berechnen.

Ex.)
Trouver $\sigma n-1$, σn, $\bar{x}$, n, Σx et Σx^2 s'appuyant sur les données: 55, 54, 51, 55, 53, 53, 54, 52.

Ej.)
Encontrar $\sigma n-1$, σn, $\bar{x}$, n, Σx y Σx^2 basándose en los datos: 55, 54, 51, 55, 53, 53, 54, 52.

Es.)
Trovare $\sigma n-1$, σn, $\bar{x}$, n, Σx e Σx^2 basandosi sui dati: 55, 54, 51, 55, 53, 53, 54, 52.

"SD" (MODE •)

SHIFT SAC 55 DATA 54 DATA 51 DATA
55 DATA 53 DATA DATA 54 DATA
52 DATA | 52.

(Sample standard deviation)
(Stichproben-Standardabweichung)
(Ecart-type sur un échantillon)
(Desviación estándar de muestra)
(Deviazione standard di campione)

SHIFT σ_{n-1} | 1.407885953

(Population standard deviation)
(Grundgesamteinheits-Standardabweichung)
(Ecart-type sur une population)
(Desviación estándar de población)
(Deviazione standard di popolazione)

SHIFT σ_n | 1.316956719

(Arithmetical mean)
(Arithmetischer Mittelwert)
(Moyenne arithmétique)
(Media aritmética)
(Media aritmetica)

SHIFT $\bar{x}$ | 53.375

(Number of data)
(Anzahl der Daten)
(Nombre de données)
(Número de datos)
(Numero di dati)

SHIFT n | 8.

(Sum of value)
(Wertsumme)
(Somme de valeurs)
(Suma de valores)
(Somma di valori)

SHIFT Σx | 427.

(Sum of square value)
(Summe des Quadratwerte)
(Somme de valeurs carrées)
(Suma de valores al cuadrado)
(Somma dei valori al quadrato)

SHIFT Σx^2 | 22805.

What is deviation of the unbiased variance, the difference between each datum, and the mean of the above data?

Berechne die unverfälschte Varianz, den Unterschied zwischen den einzelnen Daten und den Durchschnittswert der obigen Daten.

Quel est l'écart de la variance neutre, la différence entre chaque donnée et la moyenne des données ci-dessus?

¿Cuál es la desviación de una varianza sin sesgo, la diferencia entre cada dato, y la media de los datos anteriores?

Quali sono la deviazione di varianza non distorta, la differenza tra ciascun dato, e la media dei dati di cui sopra?

(Continuing) SHIFT σ_{n-1} SHIFT x^2 | 1.982142857
(Fortsetzung)
(En continuant)
(Continuando)
(Continuando)

SHIFT $\bar{x}$ − − 55 = | 1.625
$(55-\bar{x})$

54 = | 0.625
$(54-\bar{x})$

51 = | −2.375
$(51-\bar{x})$

What is $\bar{x}$ and σ_{n-1} for the following table?

Berechne $\bar{x}$ und σ_{n-1} für die folgende Tabelle

Quelles sont les valeurs de $\bar{x}$ et σ_{n-1} pour le tableau suivant?

¿Cuál es el valor de $\bar{x}$ y σ_{n-1} para la siguiente tabla?

Qual è il valore per $\bar{x}$ e σ_{n-1} per la tabella seguente?

Class no. Klassen-Nr. Classe No. Núm. de clase Classe n. Valore	Value Wert Valeur Valor	Frequency Häufigkeit Fréquence Frecuencia Frequenza
1	110	10
2	130	31
3	150	24
4	170	2
5	190	3

SHIFT SAC 110 × 10 DATA	110.
130 × 31 DATA	130.
150 × 24 DATA	150.
170 DATA DATA	170.
190 DATA DATA DATA	190.
SHIFT n	70.
SHIFT $\bar{x}$	137.7142857
SHIFT σ_{n-1}	18.42898069

*Pressing σ_{n-1}, σ_n, $\bar{x}$, n, Σx or Σx^2 key need not be done sequentially.
*With data of the same value, the DATA key enters the number of data and the × key enters the value.
*To delete wrong entries press the DEL key after the SHIFT key.

*Die Tasten σ_{n-1}, σ_n, $\bar{x}$, n, Σx oder Σx^2 brauchen nicht in dieser Reihenfolge betätigt werden.
*Werden Daten mit gleichem Wert eingegeben, dann ist die DATA Taste für die Eingabe des Datenzahl und die × Taste zur Eingabe des Datenwertes zu verwenden.
*Um eine falsche Eingabe zu löschen, die DEL Taste nach der SHIFT Taste drücken.

*L'appui sur la touche σ_{n-1}, σ_n, $\bar{x}$, n, Σx ou Σx^2 n'est soumis à aucun ordre.
*Avec des données de la même valeur, la touche DATA entre le nombre de données et la touche × entre la valeur.
*Pour supprimer des entrées erronées, appuyer sur la touche DEL après avoir appuyé sur la touche SHIFT.

*La presión de las teclas σ_{n-1}, σ_n, $\bar{x}$, n, Σx ó Σx^2 no necesita ser hecha en secuencia.
*Con datos del mismo valor, la tecla DATA introduce el número de datos y la tecla × introduce el valor.
*Para borrar una entrada equivocada, presionar la tecla DEL después de la tecla SHIFT.

*Non è necessario premere i tasti σ_{n-1}, σ_n, $\bar{x}$, n, Σx, Σx^2 in quest'ordine.
*Con dati dello stesso valore, il tasto DATA registra il numero di dati ed il tasto × ne registra il valore.
*Per cancellare una registrazione sbagliata premere il tasto DEL dopo il tasto SHIFT.

•Correction procedure I
Correct input: 51 DATA

•Korrekturvorgang I
Die folgende Eingabe berichtigen: 51 DATA

•Procédure de correction I
Entrée correcte: 51 DATA

•Procedimiento de corrección I
Ingreso correcto: 51 DATA

•Procedimento di correzione I
Immissione corretta: 51 DATA

Error/Fehler Erreur/Error Errore	Correction/Berichtigung Correction/Corrección Correzione/
50 DATA	SHIFT DEL 51 DATA
51 ×	1 DATA (or/oder/ou/o/eller AC 51 DATA)

Use the following procedure when the error is discovered after inputting other data.

Den folgenden Vorgang verwenden, wenn der Fehler nach der Eingabe von anderen Daten festgestellt wird.

Utiliser la procédure suivante lorsque l'erreur est découverte après avoir entré d'autres données.

Utilice el siguiente procedimiento cuando se descubre el error luego de ingresar otros datos.

Usare il seguente procedimento quando ci si accorge dell'errore dopo aver immesso altri dati.

49 DATA	49 SHIFT DEL 51 DATA

- **Correction procedure II**
  Correct input: 130 × 31 DATA
- **Korrekturvorgang II**
  Die folgende Eingabe berichtigen: 130 × 31 DATA
- **Procédure de correction II**
  Entrée correcte: 130 × 31 DATA
- **Procedimiento de corrección II**
  Ingreso correcto: 130 × 31 DATA
- **Procedimento di correzione II**
  Immissione corretta: 130 × 31 DATA

Error/Fehler Erreur/Error Errore	Correction/Berichtigung Correction/Corrección Correzione
120 ×	AC 130 × 31 DATA
120 × 31	AC 130 × 31 DATA

Use the following procedure when the error is discovered after inputting other data.

Den folgenden Vorgang verwenden, wenn der Fehler nach der Eingabe von anderen Daten festgestellt wird.

Utiliser la procédure suivante lorsque l'erreur est découverte après avoir entré d'autres données.

Utilice el siguiente procedimiento cuando se descubre el error luego de ingresar otros datos.

Usare il seguente procedimento quando ci si accorge dell'errore dopo aver immesso altri dati.

120 × 30 DATA	120 × 30 SHIFT DEL 130 × 31 DATA